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A META-ANALYSIS OF CULTURAL DIFFERENCES IN REVENGE
AND FORGIVENESS

by

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Abstract

Revenge, the act of retaliating against a person or group in response to a perceived wrongdoing, appears to be a human universal. Those who research culture, revenge, and forgiveness have indicated cultural differences, but no clear patterns have emerged that could be useful in mediating conflicts. Thus, a meta-analysis was conducted of studies in which people from two different countries were compared on a measure of revenge or forgiveness. The countries represented were also coded based on Geert Hofstede's national culture dimensions, to test whether any specific cultural characteristics moderated desire for revenge. The final sample was made up of 16 studies, including data from 9416 participants across 16 countries. The largest cultural differences in revenge and forgiveness were observed between countries also showing the largest differences in Uncertainty Avoidance and Power Distance. Participants from countries higher in Uncertainty Avoidance and Power Distance were more likely to seek revenge and less likely to forgive, though the pattern was not statistically significant. These results indicate that, when working toward reconciliation, divergent strategies might be required for different countries and cultures based on the level of Uncertainty Avoidance and Power Distance that exist within those cultures.

A Meta-analysis of Cultural Differences in Revenge and Forgiveness

When conflict and offense occur, the wronged party might choose to seek revenge against the perpetrator(s) or to forgive the offense. Revenge is the act of retaliating against a person or group in response to a perceived wrongdoing, “the attempt, at some cost or risk to oneself, to impose suffering upon those who have made one suffer” (Elster, 1990; McCullough, 2008). Revenge can lead to substantial personal loss via relationship termination or subsequent retaliation, making it extremely risky (Yoshimura, 2007). Not only do those perpetrating revenge have to fear retaliation, they also have detrimental physical and mental health effects. Carlsmith, Wilson, and Gilbert (2008), for example, found participants who were given the opportunity to seek revenge against a free rider in a prisoner’s dilemma game experienced more negative thoughts and emotions as a consequence than did participants not given the opportunity to seek revenge. These negative thoughts and emotions can have an impact on physical health. Lawler et al. (2005) found increased thoughts of revenge led to increased cardiovascular reactivity, a risk factor for cardiovascular disease.

Whereas revenge is manifested as an action, people experience many related thoughts and feelings associated with the decision to seek revenge (Gollwitzer, Meder, & Schmitt, 2011). Angry afterthoughts and angry memories of the offense often produce anger rumination. Anger rumination is repetitious focusing on negative thoughts related to a previous offense. These negative thoughts can include re-enacting the offense in one’s mind, fantasies about how one might seek revenge, and dwelling on other related offenses they have experienced (Barber, Maltby, Macaskill, 2005).

Ruminative thinking about an offense frequently leads to motivations to seek revenge and can also be an obstacle to forgiveness (McCullough, Bellah, Kilpatrick, & Johnson, 2001).

McCullough, Bono, and Root (2007) recruited participants who had experienced a serious interpersonal hurt within the past week. Participants completed a measure on rumination and completed the transgression-related interpersonal motivations inventory (TRIM), which included a revenge subscale. The researchers then followed up with the participants every two weeks for eight weeks to see how revenge changed through time. They found that increases in ruminative thinking about the offence were associated with corresponding increases in revenge motives. Additionally, reducing rumination about a transgression was related to decreases in revenge over time, which they termed “trend forgiveness.” The extent to which people reduce their level of rumination over time is strongly related to their ability to forgive over time, likely because changes in thinking lead to changes in emotions (McCullough, et al., 2001).

The emotion most often associated with revenge is anger. This feeling of anger often leads to a desire for revenge which does not lessen until it is recognized and released (Fitzgibbons, 1986). McCullough, Kurzban, & Tabak (2010) suggest that this anger is an emotional response that evolved in order for the victim to motivate the perpetrator to alter their behavior. This anger may be unnecessary if the victim instead can motivate the perpetrator to alter their behavior through forgiveness and reconciliation. Coyle and Enright (1997) found that people taught to forgive experience a significant reduction in anger toward the person who wronged them.

McCullough, et al. (2001) suggest a victim can punish a perpetrator either by harming them or by withholding benefits. Yoshimura (2007) included nine types of revenge behavior in his analyses on the goals and emotional outcomes of revenge: active distancing, new relationship initiation, resource removal, uncertainty-increasing attempts, verbal exchange, reputation defamation, property damage, physical aggressiveness, and other. The most common were active

distancing, “withdrawal of one’s physical or emotional accessibility to the other,” physical aggressiveness, “attempts to cause the target physical discomfort, distress, or pain,” and reputation defamation, “attempts to reduce the target’s positive public image by illuminating personal or negative aspects of the person for others” (p. 8). Yoshimura found few positive feelings resulted from revenge, and the stronger emotions associated with revenge were remorse, anger, anxiety, and fear. Given the negative emotions associated with seeking revenge, seeking forgiveness and relationship reconciliation might be a better option for dealing with past offenses.

Forgiveness is a process that involves changes in the cognitions, emotions, and behaviors regarding the transgressor (Enright & Fitzgibbons, 2000). Rye et al. (2001) also conceptualize forgiveness as a three part process: letting go of the negative cognitions (e.g., thoughts of revenge), removing the destructive feelings (e.g., hostility, anger), and altering the damaging behaviors (e.g., aggression, avoidance). Pronk, Karremans, Overbeek, Vermulst, and Wigboldus (2001) studied the cognitive processes that underlie forgiveness. In four separate studies, they demonstrated that interpersonal forgiveness was affected by executive functioning. They found participants with higher executive functioning showed higher dispositional forgiveness over time, for both past and recent offenses. They suggested that executive functioning facilitates forgiveness by enabling the victim of the offense to decrease negative thoughts and feelings and to reactivate positive responses.

The feelings that most commonly encourage forgiveness are empathy and compassion (Fehr, Gelfand, & Nag, 2010; Fitzgibbons, 1986). Macaskill, Maltby, and Day (2002) gave participants measures of forgiveness of self, forgiveness of others, and emotional empathy. They found individuals with higher levels of empathy find it easier to forgive others. Mullet, Girard,

and Bakhshi's (2004) forgiveness measure, the Conceptualizations of Forgiveness Questionnaire, includes a subscale titled "Change of Heart." They posit a key element of forgiveness is this change, the replacement of negative emotions toward the transgressor, such as anger and resentment, by positive emotions, such as empathy and compassion. These positive emotions can lead to the behavioral components of forgiveness, conciliatory actions such as apologies, offers of compensation, or physical contact (Ho & Fung, 2011; Tabak, et al., 2012).

The behavioral components of forgiveness include both the presence of positive actions, such as helpfulness and the initiation of reconciliation, as well as the absence of negative actions, such as revenge (Subkoviak et al., 1995). The Enright Forgiveness Inventory addresses this duality by including items that measure positive behaviors and negative behaviors (e.g., "I do or would show friendship to the person who hurt me;" "I do or would avoid the person who hurt me"). A person's experience of forgiveness might involve either positive or negative behaviors or both (Rye et al., 2001).

Consequences of Revenge and Forgiveness

People who show greater tendencies toward forgiveness also show improved physical health, improved mental health, and greater life satisfaction (Harris & Thorsen, 2005; Karremans, Van Lange, Ouwerkerk, & Kluwer, 2003; Orcutt, 2006). In contrast, people who show greater tendencies toward revenge also show higher levels of neuroticism, anger, hostility, anxiety, and depression (Mullet, Neto, & Rivière, 2005). Seeking revenge seems to be associated with negative health outcomes, and seeking forgiveness seems to produce positive health outcomes.

If forgiveness produces physical and mental health and seeking revenge produces negative physical and mental outcomes, one might question why revenge is so common.

Revenge has been observed in almost every culture known to mankind (Henrich, et al., 2006). McCullough, et al. (2001) posit that whereas forgiveness developed to protect important relationships, revenge evolved to prevent future harm from the perpetrator or spectators of the maltreatment. Revenge is a method of attaining a higher-order goal, a reputation for retaliation. When groups demonstrate the drive and power to summarily retaliate, groups can avert subsequent injury (Gollwitzer, Meder, & Schmitt, 2011). The prospect of suffering revenge can dissuade aggressors from harming the potential avenger (McCullough et al., 2010).

To demonstrate the role of retaliation in revenge, Diamond (1977) asked participants write papers, and then research confederates insulted the participants by critiquing their writing. The next day, all the participants returned to the lab and were given the opportunity to shock the confederate who previously insulted them. Half of the participants were told that afterwards they would switch roles and the confederate would have the opportunity to shock them. The other half were not told that they would switch roles afterwards, so the confederate did not have an opportunity to retaliate. Those who feared revenge gave weaker shocks. Additionally, Lawler, Ford, and Blegen (1988) found that in economic bargaining games people will not harm the interests of their opponents if they know their opponents have the ability to get revenge. Thus, knowing others will seek revenge reduces the likelihood of negative actions toward others. The capacity for revenge, and demonstrating that capacity through actions, protects one against harm.

Moderators

With costs and benefits for both revenge seeking and forgiveness seeking, the decision to grant forgiveness or pursue revenge is made based on a number of factors (McCullough et al., 2010). For example, the decision to seek revenge over forgiveness is influenced by both the victim's and wrongdoer's statuses within their social hierarchy (Karremans & Smith, 2010).

Because an individual lower in power would have more to lose by risking revenge, this would suggest they would be more likely to forgive. When the risks of revenge outweigh the potential benefits, an individual is likely to pursue an alternate course, likely forgiveness (McCullough et al., 2010). Karremans and Smith (2010), however, found the opposite to be true. They found those with more power were more likely to forgive both actual past offenses and hypothetical offenses. They theorized this was because individuals with power were more likely to be goal-driven, engaging in actions that accomplish their goals and avoiding those that impede their goals. If their goal was to maintain the relationship, they were more willing to put aside anger in order to accomplish that goal.

Similarly, Aquino, Tripp, and Bies (2006) found the lower the victim's status relative to the wrongdoer, the more likely the victim was to seek revenge. Aquino et al. also indicated that a second factor, a more procedurally just environment, was related to reconciliation and forgiveness, especially for lower status victims. In these environments, the lower status victims felt their desire for justice was met through institutional protections. Individuals whose desire for justice had been met were less likely to seek revenge (Blader, Chang, & Tyler, 2001). Those who have been wronged by a member of their "in-group" also were less likely to seek revenge and more likely to forgive (Tajfel & Turner, 1986). Cornick, Schultz, Tallman, and Altmaier (2011) found Black victims reported increased benevolence toward Black offenders after distressing transgressions, but not toward White offenders. However, White victims did not report increased benevolence toward White offenders or Black offenders after distressing transgressions. This suggests the influence of in-group/out-group status affects forgiveness/revenge decisions.

Women, who tend to be more relationally oriented, are more likely to forgive in order to maintain relationships in their in-group. In their 2008 meta-analysis on gender and forgiveness,

Miller, Worthington, and McDaniel (2008) found that women were more forgiving than males overall. In a cross-cultural comparison, Kadiangandu, Mullet, and Vinosonneau (2001) found that French men reported higher levels of revenge than did French women; however, in the Congo, men and women reported similar levels of revenge. Kadiangandu et al. suggested, therefore, that, although women in general tend to forgive more, culture might moderate gender differences in revenge and forgiveness.

Revenge and Forgiveness as Cultural Universals

Whereas many factors moderate the decision to grant forgiveness or seek revenge, the concepts of forgiveness and revenge themselves are culturally universal. Ninety-five percent of all cultures show some evidence of revenge (Henrich, et al., 2006), and 93% of cultures in a probability sample of 60 different cultures (Daly & Wilson, 1988) demonstrated the concepts of forgiveness and reconciliation. Not only are revenge and forgiveness universals, a revenge and forgiveness schema is shared across many cultures and religions (Suchday, Friedberg, & Almeida, 2006). Angolan, Portuguese, French, and Indonesian participants, for example, all shared similar conceptions regarding forgiveness. The concepts of lasting resentment (holding onto anger and negativity), sensitivity to circumstances (deciding to forgive or not based on context), and willingness to forgive (maintaining generally positive attitudes about forgiveness) emerged as dominant factors in all four cultures (Neto & Pinto, 2010; Suwartono, Prawasti, & Mullet, 2007). Neto, Pinto, and Mullet (2007) found that East Timorese and Angolan participants agreed that the aim of forgiveness was reconciliation and that forgiveness was not contingent upon reparation. In a cross-cultural study of the contextual influences on seeking revenge, French Christians, Lebanese Christians, and Lebanese Muslims all indicated that they would be more forgiving if a hypothetical shooting was unintentional, did not have long-term

consequences, and was followed by an apology (Azar & Mullet, 2001). Both Chinese Christians and Chinese Buddhists share the idea that forgiveness is made up of two parts: overcoming the anger and removing the reprisal (Paz, Neto, & Mullet, 2007). In fact, all major religions, including Islam, Christianity, Judaism, Hinduism, and Buddhism espouse forgiveness in response to being wronged (Rye et al., 2000). These studies suggest considerable consistency across cultures in approaches to revenge and forgiveness.

Cultural Differences

Although revenge is culturally universal, there are also “culturally specific or relative constructs” (APA, 2003, p. 380). For example, Takaku, Weiner, and Ohbuchi (2001) gave American and Japanese participants a vignette in which another student borrowed important notes for a test and then returned them late and damaged. Both groups were then asked to shift perspectives and imagine themselves as the wrongdoer. This significantly impacted the American students’, but not the Japanese students’, perceptions of the controllability of the offense. Takaku, et al. theorized that this cultural difference occurred because in collective societies like Japan, people are seen as being influenced more by their culturally defined roles than their own personal choices. Those from collectivistic cultures, therefore, might judge offenses more on the likelihood that the offenses would be repeated in the future, and those from individualistic cultures might judge offenses more so based on the level of control they perceived the wrongdoer had over their own behavior.

Cultural differences in revenge and forgiveness also exist based on conceptions of the offended person or group. Bagnulo, Muñoz-Sastre, and Mullet (2009) offered a hypothetical vignette in which the reader has offended someone and asked for forgiveness. The way the victim responded was based on the way he or she conceptualized the construct of forgiveness.

They found that participants from Uruguay were more likely than participants from France to support the idea that forgiveness can be granted to personally unknown or deceased people. Participants from Uruguay defined both the wrongdoer and forgiver as broader categories, which included the family members, close friends, and institutions to which the individuals belonged (e.g., “The Church”). French participants had a more difficult time with the idea of granting forgiveness to an abstract institution. Therefore, studying cultural differences in revenge and forgiveness in diverse populations might produce benefits for work in cross cultural conflict and reconciliation (Sandage & Williamson, 2005).

Mullet and Neto (2009) theorized that cultural differences in perspectives on intergroup forgiveness are impacted by key events in a country’s history. For example, the authors explain that in Cambodia, members of the party who perpetrated genocide against the people, the Khmer Rouge, are still in government. The fact that perpetrators of violence were still in power influenced the people’s opinions on the course of action necessary for reconciliation. Cambodians were more likely agree that forgiveness only has meaning when the perpetrator apologizes and provides material compensation (Mullet & Neto, 2009).

Similarly, in their research on survivors of the war in Chechnya, Speckhard and Akhmedova (2006) found that those who suffered the highest levels of trauma no longer followed traditional social norms of revenge. Typically, the wronged party only had the right to retaliate against the perpetrator directly. The victims of war instead believed revenge could be exacted upon any member of the ethnic group of the perpetrator. Clearly, a culture’s history, especially one shaped by violence and war, has a powerful impact on its people’s beliefs about revenge. Knowledge about such cultural differences might prove vital to those working toward reconciliation and compromise in the associated countries.

Hofstede's Dimensions of Culture

Important cultural differences exist in how people conceive of and approach revenge and forgiveness. These differences might have important implications for cross-cultural understanding, conflict, and reconciliation. One way to analyze these cultural differences is by utilizing Hofstede's Dimensions of Culture. Geert Hofstede (2001) pioneered a way to analyze countries' cultural distinctiveness using a database from a multi-national corporation, IBM. The database included a series of employee attitude studies from 71 countries. Upon his initial analysis of the data, Hofstede found four cultural dimensions: Individualism versus Collectivism, Masculinity versus Femininity, low versus high Power Distance, and low versus high Uncertainty Avoidance.

Individualism

Individualism/Collectivism (IDV) describes the level at which individuals are integrated into groups in a culture (Hofstede, 2001). Individualistic countries, of which the United States is the highest, encourage their members to be independent and self-sustaining. People in individualistic cultures are more self-reliant and show more initiative, and they expect the same from others (Deal & Prince, 2003). In more individualistic cultures, confrontations are normal and expected, a result of expressing one's opinion without strong focus on its impact on the group (Hofstede, 2001).

Individualistic cultures present people as independent entities. Confrontations are normal, so utilizing forgiveness to preserve relationships would have less value. The individualistic perspective suggests that if wronged, only the individual would have the right to give or withhold forgiveness and that the decision probably would be based on the personal gain obtained by that individual from their acts of revenge or forgiveness. For those from individualistic cultures,

forgiveness often is motivated by a search for personal peace (Miller, Worthington, & McDaniel, 2008).

Collectivistic cultures present people as interdependent. In Collectivistic cultures such as Taiwan, members are heavily integrated into groups and are encouraged to care for their large extended families. People in more Collectivistic cultures give loyalty and support to their groups and in return expect social connection and security (Deal & Prince, 2003). If forgiveness occurs, it not only is offered by the individual, but by their family, group, or clan as well. Because people in collectivistic cultures are motivated predominantly by the social norms and obligations of the group, forgiveness likely is based on restoring social harmony (Hook, Worthington, & Utsey, 2009). In fact, Karremans, et al. (2011) found that in collectivistic cultures the closeness of the relationship of the victim to the offender has a significantly smaller impact on level of forgiveness than it does in individualistic cultures, which they attribute to the strong social norm to maintain the overall social harmony of the group, as opposed to a single relationship.

In numerous studies, researchers have compared two cultures' perspectives on revenge, frequently focusing on the collectivist/individualist differences between the two. According to Sandage and Williamson (2005), the use of forgiveness is a culturally based decision, which occurs at many different levels from the individual one-on-one relationship all the way to the relationships of conflicting nations. These multi-level contexts make individualism and collectivism "a promising set of dimensions for understanding cultural differences." In past studies comparing the two, researchers have indicated that people higher in Collectivism tend to forgive more (So, 2004).

Kadiangandu et al. (2001) found more behaviorally interdependent (i.e., collectivist) cultures are more forgiving than comparable individualistic cultures. Perhaps those higher in

Collectivism forgive more easily or frequently in order to maintain social harmony, since their orientation is interdependent (Fu, Watkins, & Hui, 2008; Hook, Worthington, Utsey, Davis, & Burnette, 2012). Takaku, et al. (2001) found Japanese participants were significantly more likely to state that they forgave to maintain a relationship or to follow the norms of how others would react in the same situation. Kadinangandu et al. (2001) found that collectivistic Congolese participants claimed to be more forgiving than did the individualistic French participants. The Congolese system of justice also seems to be more “forgiving” than that of the French. Whereas the French system of justice is more punitive and involves sanctions controlled by governmental authorities, like police and judges, the Congolese system relies more on a system of restorative justice. Punishment in the Congolese system is accomplished through relational exclusion, followed by forgiveness and social reintegration, such as a meetings led by elder members of the group focused on solving the disputes (Kadinangandu et al., 2001).

In contrast, Nateghian, Molazadeh, Lignon, and Mullet (2009) found no differences between French and Iranian adults, though the two countries vary greatly in their levels of individualism. This lack of expected differences led Nateghian et al. to conclude, “... that the individualism-collectivism construct does not always adequately explain the differences in forgiveness from one culture to another” (p.350). Neto and Pinto (2010) agree that there are, “...possibly many differences across cultures...that may impact views of forgiveness” (p.277). One way the variety of cultural differences that impact revenge and forgiveness may be explained is by using all four of Geert Hofstede’s (2001) key cultural dimensions.

Power Distance

Power Distance (PDI) is the degree to which less powerful members of organizations accept that power is distributed unequally. In low Power Distance index (PDI) countries (e.g., Australia, Denmark, and New Zealand), those holding the power will try to downplay their authority, almost as if they are embarrassed by it (Hofstede, 2001). In high-PDI countries (e.g., Malaysia and the Philippines), it is believed that the strict hierarchy protects both those who have authority and those who do not (Hofstede). Training in Power Distance begins while group members are young, when children are taught at home either to obey or to innovate. It is important to note that followers endorse their society's level of power inequality as much as do the leaders.

Because individuals in high PDI cultures expect and accept that power is distributed unequally, revenge would be a more necessary strategy than in low power distance cultures where power relations are more democratic and perceptions of procedural justice are high (Hofstede, 2001). In high PDI cultures, those low in the power structure hold those high in the power structure accountable for the interests of everyone, and penalize those high in the structure when they abuse their power. Additionally, Aquino, et al. (2006) administered surveys to employees of a public utility and found the lower the victim's status relative to the perpetrator, the more likely it is they will seek revenge. They theorize this is because employees low in the social status hierarchy had to more carefully defend the little status or resources they possessed. Therefore, the occurrence of revenge should be more frequent in high power distance cultures, where status is unequally distributed and relative rank is highly salient.

Masculinity

Masculinity versus Femininity (MAS) refers to a culture's assignment of emotional gender roles. Hofstede (2001) found that women's values are more similar across societies than men's values. He also found that men's values vary on their amount of similarity to women's values in different cultures. This led him to call cultures that valued ambition and achievement "masculine" and those that valued relationships and quality of life "feminine." A high score on the MAS dimension indicates that a country has a high degree of gender differentiation (e.g., the Middle East). In these cultures, males are likely to control a significant portion of the power structure of the society.

A score low on the MAS dimension means a society has a low level of differentiation and little inequity between genders (e.g., the Netherlands). In low MAS cultures, females are treated similarly to males in all aspects (Hofstede, 2001). There are similar expectations for dealing with feelings, fighting, and communicating, as opposed to countries high on MAS dimension where "Girls cry; boys don't" and "Boys fight back; girls don't" (Van Rossum, 1998). These practices continue into adulthood. For example, in countries low on the MAS dimension, men are just as likely as women to care for children (Hofstede, 2001). Because "masculine" cultures prioritize what Hofstede calls "ego-goals" (e.g., competitiveness, ambition, and the accumulation of wealth), revenge would be a more efficient strategy than it would be for feminine cultures that value "social goals" (e.g., relationships and quality of life). In fact, high MAS cultures are more punitive in their political priorities, while low MAS cultures are more corrective (Hofstede, 2001).

Uncertainty Avoidance

The Uncertainty Avoidance Index (UAI) describes the level of a country's tolerance for ambiguity (Hofstede, 2001). It indicates how comfortable members feel in unstructured situations and how hard they will work to minimize the unknown. In low UAI countries (e.g., the United States, the United Kingdom, and China), members prefer flexible rules and informal activities. In high UAI countries (e.g., Greece, Japan, and Argentina), specific rules and regulations are in place to decrease the occurrence of surprising and unexpected situations.

According to Strelan & Sutton (2011), most people, starting in childhood, believe in a “just world,” where good behavior is rewarded and bad behavior is punished. This allows them “to proceed through life confident in the expectation that events and outcomes are fair and predictable” (p. 163). This would suggest that people who place more value on predictability and certainty might be more focused on retribution or justice in order to maintain their view of the world. People may seek revenge because they feel wronged and have a sense of unsatisfied justice when a situation fails to conform to a “norm of reciprocity” (Eisenberger, Lynch, Aselage & Rohdieck, 2004). Indeed, Kaiser, Vick, and Major (2004) found that the more American participants endorsed belief in a just world, the more likely they were to desire revenge for the terrorist attack perpetrated on the World Trade Center on September 11, 2001. Therefore, the level of uncertainty avoidance in a culture likely impacts the desire for revenge or forgiveness.

Summary and Hypotheses

While there are many cultural similarities in forgiveness and revenge, there are also cultural differences. Learning more about these cultural differences is important because groups'

attitudes about forgiveness and revenge impact their attitudes towards their families, their societal institutions, and broader international events (Paz, 2008; Neto & Pinto, 2010).

Hofstede's (2001) Dimensions of Culture were an excellent tool to analyze these differences in depth. Based on previous research and theoretical conceptions of Hofstede's dimensions, the following hypotheses result.

Hypothesis 1: Participants from countries lower in Individualism (higher in Collectivism) will report more forgiveness and less revenge.

Hypothesis 2: Participants from countries lower in Masculinity (higher in Femininity) will report more forgiveness and less revenge.

Hypothesis 3: Participants from countries lower in Uncertainty Avoidance will report more forgiveness and less revenge.

Hypothesis 4: Participants from countries lower in Power Distance will report more forgiveness and less revenge.

Secondary Hypotheses

The analyses included examination of three potential methodological moderators: participant class or age, percentage of female participants, and a country's recent history of war. Participant class, whether participants in a study were college students or adults, may affect results. Subkoviak et al. (1995) found college students to be less forgiving than their parents. A study where researchers utilize only college students may indicate more revenge than a study with only adult participants. Secondly, the percentage of the participants in a study that are

female may affect results. A meta-analysis by Miller, Worthington, and McDaniel (2008) on gender and forgiveness found females were more forgiving than males. A country may appear to be more forgiving if the sample is predominantly female. Lastly, the recent history of war in a country may affect results. Speckhard and Ahkmedova (2006) found that war survivors who suffered the highest levels of trauma no longer followed traditional social norms of revenge. If a country has recent history of war or extreme violence this may affect their desire for revenge more than their cultural dimensions.

Method

Searching the Literature

I reviewed empirical journal articles focusing on revenge, forgiveness, and culture. First, I completed subject indexing by searching PsychINFO and PsycARTICLES for keywords and keyword pairings including revenge, culture, cultural, rumination, forgiveness, and forgivingness. Second, I completed “footnote chasing” of the relevant articles, by locating all of the articles cited by the initial articles found in the subject indexing search. Third, I completed citation indexing by pulling the articles ProQuest indicated had cited any of the three earliest articles published on the topic (Kadiangandu, et al., 2001; Takaku, Weiner, & Ohbuchi, 2001; Tinsley & Weldon, 2003), and then identifying relevant publications. Fourth, using PsycINFO, PsycARTICLES, and Google Scholar, I searched the names of prominent researchers in the field, including Etienne Mullet, Felix Neto, Joachim Kadima Kadiangandu, Regina Paz, and Maria da Conceição Pinto, examining all articles located by searching these authors’ names. Fifth, I contacted several prominent researchers in the field to inquire whether they had unpublished studies they would contribute to the sample. In addition, I browsed through the journals where I had found the principal amount of relevant articles; I read the table of contents for the *Journal of*

Cross-Cultural Psychology, Personality and Individual Differences, and the *Journal of Peace Psychology*. I reviewed the table of contents in these journals from the most recent year through 1980, the year Geert Hofstede first published an article on the dimensions of national culture.

Inclusion Criteria

For the purpose of this meta-analysis, the sample included a research study only if it compared data from different countries on a measure of either revenge or forgiveness. It was important the studies compare two different countries, as this is how Hofstede's (2001) scores were assigned. This criterion also excluded studies where data were gathered on participants originating from a particular country, but currently residing in another country. Studies were included that measured revenge or forgiveness behaviors or identified self-reported attitudes or intentions to retaliate against a perceived wrong or to remove negative responses toward a perceived offender. These criteria provided for the exclusion of studies that measured only aggression or empathy, as neither of these constructs includes the required element of consequences (or removal thereof) to a perceived offense. These criteria also provided for the exclusion of instances of forgiveness within which researchers made no cross-cultural comparisons and within which attitudes were not measured on revenge or forgiveness (e.g., workplace retaliation, Blader, et al., 2001).

The selection criteria allowed for studies that included self-report measures of revenge or forgiveness. Two examples of specific measures were the Conceptualization of Forgiveness Questionnaire (Mullet, Girard, & Bakhshi, 2004) and the Thoughts of Revenge subscale of the Anger Rumination Scale (Sukhodolsky, Golub, & Cromwell, 2001). Most researchers used a

measure specific to their own study. Additionally, I included studies only if they were available in English, and had a sample size of at least 50 (though the smallest sample size was 177).

Study Sample

Sixteen studies constituted the final meta-analysis data set. Two studies were excluded because although they compared two cultures, these two cultures were within the same country, which would prevent the use of Hofstede's (2001) scores on the cultural dimensions in the analysis (e.g., Christian and Buddhist Chinese in Paz, Neto, & Mullet, 2007; Catholic, Maronite, Orthodox Christian, Druze, Shiite, and Sunni Lebanese in Azar & Mullet, 2002). Three unpublished studies were submitted by leading authors in the field, yet none of the three studies met the criteria to be included in the meta-analysis because the studies failed to include data from two different countries.

Coding of Study Characteristics

For each study, two coders (the primary author and her thesis advisor) noted the forgiveness or revenge measure used in the study (e.g., The Conceptualization of Forgiveness Questionnaire, The Anger Rumination Scale), the countries being compared, the mean and standard deviation on the measure of forgiveness or revenge for each group (i.e., each country), and the number of participants in each country. Because desire for revenge correlates with sex and age, they served as covariates. To address this potential bias, coders identified the percentage of female participants in each study. Coders noted the type of participant (either college student, general population, or a mixed student and general population sample) and median age of the participants. Coders identified Individualism/Collectivism, Masculinity/Femininity, Power Distance, and Uncertainty Avoidance scores based on the results published by Hofstede (2001).

Hofstede did not have scores listed for five of the countries in the sample. In such instances, coders used the scores for the most geographically and culturally similar country (with similar history, cultural, and religious traditions; see Table 1 for countries and scores used in the analysis).

Table 1: *Scores on Hofstede's Dimensions for Countries in Sample*

Country	IDV	MAS	PDI	UAI
Angola (West Africa)	20	46	77	54
China	20	66	80	30
Congo (West Africa)	20	46	77	54
East Timor (Indonesia)	14	46	78	48
France	71	43	68	86
Great Britain (United Kingdom)	89	66	35	35
Hong Kong	25	57	68	29
Indonesia	14	46	78	48
Iran	41	43	58	59
Japan	46	95	54	92
Lebanon (Arab World)	38	52	80	68
Mozambique (East Africa)	27	41	64	52
Portugal	27	31	63	104
United States	91	62	40	46
Uruguay	36	38	61	100

Note. IDV = Individualism Index, MAS = Masculinity Index, PDI = Power Distance Index, UAI = Uncertainty Avoidance Index; All scales range between 1-120

Computation of Effect Size

The standardized mean difference represented the standard measure of effect size in the current study. All of the studies in the sample observed differences between participants in different countries, which made the use Cohen's d ($d = \bar{x}_1 - \bar{x}_2 / SD_{pooled}$) optimal. The independent variable was categorical (the country of origin), and the dependent variable was continuous (e.g.,

level of intention for revenge or forgiveness). Hedges and Olkin's (1985) correction produced an unbiased effect size estimate: $d_{unbiased} = (1 - \frac{3}{4(N-2)-1}) \times d$.

Combining of Effect Sizes

After establishing the unbiased effect size estimate, each effect size estimate was weighted by the reciprocal of its variance, giving more weight to the results from studies that had larger sample sizes (Shadish & Haddock, 1994). In estimating the variance, I used a random-effects model for the analysis. The random-effects model is more conservative than the fixed-effects model (Berlin, Laird, Sacks & Chalmers, 1989), taking into account variability expected based on study design, and is more appropriate when there are considerable differences in the research design across studies included in the meta-analysis (Hedges & Vevea, 1998).

Each mean (combined) effect size has a 95% confidence interval within which the mean effect size is expected to vary given random sampling variation. This confidence interval represents the likely scores of the mean effect size if different studies were conducted and effect sizes were obtained. Ninety-five percent of the effect sizes from those hypothetical studies would fall within the reported range. If the confidence interval includes zero, then one cannot statistically distinguish the mean effect size from zero. If the confidence interval does not include zero, then one can distinguish the effect size from zero, rejecting the null hypothesis that the mean effect size is no different than zero. One also tests the null hypothesis by constructing a Z-test by dividing the mean effect size by the square-root of the estimated variance (Shadish & Haddock, 1994).

Moderator analyses

The heterogeneity within Q -statistic (denoted as Q_{within}) indicates overall variability within the effect sizes, whether the variability among the sample of effect sizes was different than what would be expected by chance if all of the studies came from the same normal distribution. For each group of effect sizes, I estimated the variability among those effect sizes testing the null hypothesis of homogeneity. Under the assumption of homogeneity, the Q_{within} has a chi-square distribution with $k-1$ degrees of freedom, where k is the number of studies included in the analysis (Borenstein, Hedges, & Rothstein, 2007). The inverse of the variance associated with each effect size served as a weight for the Q_{within} analyses, giving more weight to effect sizes based on larger samples (Borenstein, et al.). In these analyses, larger Q_{within} values indicate larger heterogeneity among effect sizes.

A similar statistical model tests for differences between groups of effect sizes, known as moderator analyses. The heterogeneity between Q -statistic (denoted as Q_{between}) determines if there are significant differences between groups of effect sizes (Shadish & Haddock, 1994). The grouping variables included in moderator analyses were participant type (college student, general population, or mixed), percentage of the sample that was female, and whether the country was currently experiencing war within their borders. In such cases, the Q_{between} statistic tests the null hypothesis that the differences between the weighted mean effect sizes across groups come from the same normal distribution, that is, that the effect sizes are homogeneous. A significant Q_{between} value indicates that the hypothesis of homogeneity can be rejected. Under the assumption of homogeneity, the Q_{between} statistic has a chi-square distribution with $g-1$ degrees of freedom, where g is the number of groups of effect sizes compared. The inverse of the variance associated

with each effect size served as a weight for the Q_{between} analyses, giving more weight to effect sizes based on larger samples (Borenstein, et al., 2007).

Moderator analyses of continuous variables (e.g., the percentage of female participants included in the study), involved the comparison of the level of effect size for each study at each level of the continuous variable. Linear regression analyses weighted by the inverse of the variance for each effect size produced a standardized estimate of the covariation between levels of effect size and levels of the continuous variable across studies. A significant Q_{between} statistic from the weighted linear regression (based on the sums of squares regression) indicates that would have occurred by chance if there was no relationship between levels of the moderator variable and the effect size across studies (Borenstein, et al., 2007).

Results

The effect size was calculated using the mean of Country A (higher in individualism) and the mean of Country B (lower in individualism). Table 2 contains the effect estimates used in the analysis. A positive mean effect size indicates that Country A (a country higher in individualism) was more forgiving than Country B (a country lower in individualism). A negative mean effect size indicates that Country B was more forgiving than Country A. The weighted overall mean effect size (d^*) was -.087, indicating that collectivistic countries were more forgiving than were individualistic countries. However, the magnitude of this effect size cannot be significantly distinguished from zero ($Z = -.31$). The 95% confidence interval for the mean for all 16 effect sizes ranged from -0.03 to 0.18. Because the confidence interval includes 0, the effect size is not statistically significant, and the null hypothesis cannot be rejected.

Table 2

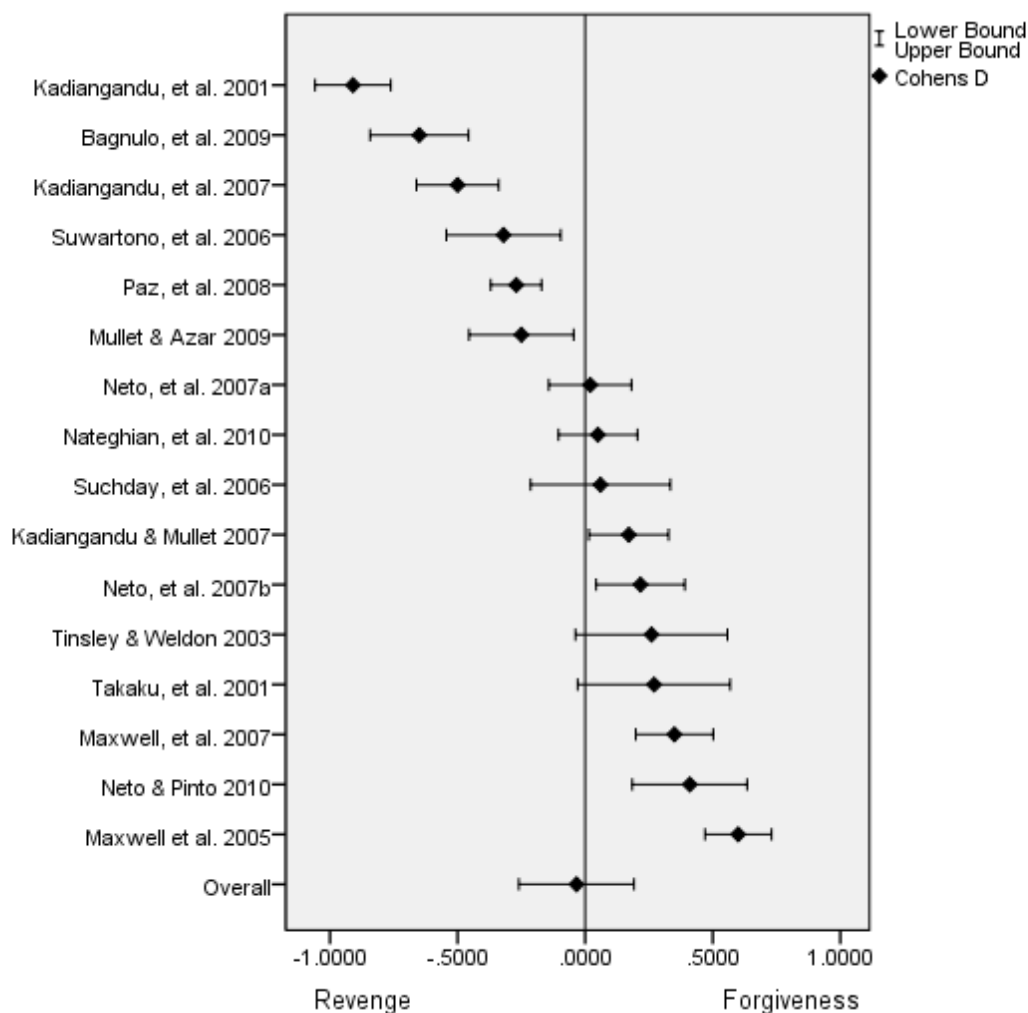
Studies included in the sample with sample details and effect size

Study	Country A	Country B	Sample Size	Participant Type	Percent female	Effect size
Bagnulo, Sastre, & Mullet, 2009	France	Uruguay	446	Adults	57	-0.65
Kadiangandu, Gauche, Vinsonneau, & Mullet, 2007	France	Congo (West Africa)	619	Mix	56	-0.5
Kadiangandu, Mullet, & Vinsonneau, 2001	France	Congo (West Africa)	796	Adults	59	-0.91
Maxwell, Moores, & Chow, 2007	Great Britain	Hong Kong	684	Students	44	0.35
Maxwell, Sukhodolsky, Chow, & Wong, 2005	Great Britain	Hong Kong	948	Students	49	0.6
Mullet & Azar, 2009	France	Lebanon (Arab countries)	391	Adults	57	-0.25
Nateghian, Molazadeh, Lignon, & Mullet, 2009	France	Iran	651	Students	53	0.05
Neto & Pinto, 2010	Portugal	Angola	363	Students	59	0.41
Neto, Pinto, & Mullet, 2007	Angola (South Africa)	East Timor (Indonesia)	604	Mix	50	0.02
Neto, Pinto, & Mullet, 2007	Mozambique (East Africa)	Congo (West Africa)	673	Adults	-	0.22
Kadiangandu & Mullet, 2007	Congo (West Africa)	East Timor (Indonesia)	730	Adults	-	.17
Paz, Neto, & Mullet, 2008	France	China	1567	Adults	55	-0.27
Suchday, Friedberg, & Almeida, 2006	U.S.	India	259	Students	66	0.06
Suwartono, Prawasti, & Mullet, 2006	France	Indonesia	329	Students	64	-0.32
Takaku, Weiner, & Ohbuchi, 2001	U.S.	Japan	179	Students	53	0.27
Tinsley & Weldon, 2003	U.S.	China	177	Adults	37	0.26

The Forest plot (see Figure 1) shows the pattern of the effect sizes, their magnitude, and the 95% confidence interval around each estimate of the effect size. The smaller confidence intervals indicate studies with larger sample sizes. I have included the overall effect size which shows the weighted average effect size and the confidence interval based on a combination of the data from all of the studies. The confidence interval around the overall effect size represents the stability that is gained by accumulating evidence over multiple studies. The effect sizes are sorted by magnitude of the effect. Any confidence interval that does not include the bar representing 0 (down the middle of the graph) is associated with effect estimates that are statistically different than zero. Of interest, all of the effect sizes that show a negative relationship are statistically different than zero. Of the seven effect sizes that show a positive relationship, only two of these are significantly different than zero.

Publication bias remains a potential source of bias in any meta-analytic review. Often termed the “file drawer problem,” publication bias refers to the fact that studies having significant results are more likely to be published than those that have null results. Those with non-significant results are stuck in the back of the file drawer and never seen outside the lab (Rosenthal, 1979). I addressed this issue by soliciting unpublished articles by leading authors in the field. I received several studies from one author, but none that fit the specifications for inclusion in the meta-analysis because they did not compare two different countries. In addition to soliciting unpublished articles and searching dissertations, I also used a funnel plot to investigate any bias in the reported results (see Figure 2).

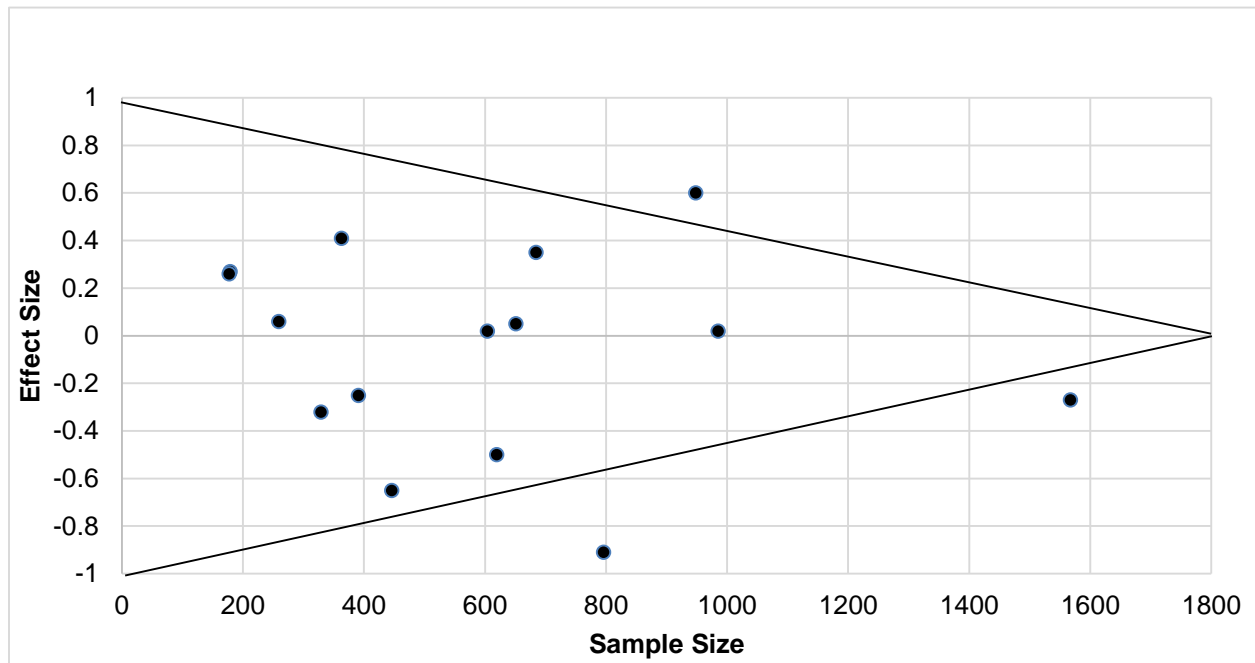
Figure 1. *Forest Plot showing the Pattern of Effect Sizes across Studies*



If the effect sizes were restricted to only one half of the funnel plot for smaller sample sizes, either showing only positive effect sizes or only negative effect sizes, this would indicate publication bias. Because the points are scattered across all levels of sample size, publication bias is not evident in this data set. Additionally, the magnitude of the effect size was disbursed above and below the origin (the origin is the zero point or the location of no effect on the graph). Additionally, the majority of the studies had relatively large sample sizes so the variation is relatively small making the estimates that were provided in those studies robust.

My major goal was to assess whether or not differences between countries in levels of forgiveness were related to Individualism/Collectivism (IDV), Masculinity/Femininity (MAS), low or high Power Distance (PID), and low or high Uncertainty Avoidance (UAI). I utilized correlation coefficients as they are a sensitive form of analysis. Correlation coefficients are a measure of dependence between two variables. Researchers have previously found collectivistic societies to be more forgiving than individualistic societies, and the analyses in the current study supported previous findings. I found the higher a country was in Individualism, the more likely they were to desire revenge [$r(15) = -.11; p = .69$]. For every one standard deviation increase in Individualism, there is a .11 standard deviation increase in revenge. This relationship,

Figure 2. *Funnel Plot of Cohen's d by Sample Size*



however, could not be statistically distinguished from zero, $Q_{between}(1) = .16, ns$. The between study variance for this effect was estimated at $\tau^2 = 0.19$. Thus, when comparing between study variance to random sampling variance, 95% of total variance in effect sizes could be attributed to

between study variance. When accounting for the estimated between studies variances, the remaining variability across studies cannot be distinguished from random sampling variation, $Q_{within}(15) = 13.22, ns$.

Because individuals in high PDI cultures expect that power is distributed unequally, revenge would be a necessary strategy as opposed to low distance cultures where power relations are more consultative and democratic. I hypothesized the occurrence of revenge should be more frequent in high power distance cultures where status is unequally distributed and relative rank is highly salient. As expected, countries high in PDI were more likely to desire revenge than countries low in PDI [$r(15) = -.35, p = .18$]. For every one standard deviation in Power Distance, there is a .35 standard deviation increase in revenge. This relationship, however, could not be statistically distinguished from zero, $Q_{between}(1) = 1.63, ns$. The between study variance for this effect was estimated at $\tau^2 = 0.19$. When accounting for estimated between studies variances the remaining variability across studies cannot be distinguished from random sampling variation, $Q_{within}(15) = 13.17, ns$.

Because cultures high in MAS prioritize competitiveness, ambition, and the accumulation of wealth, countries high in masculinity should be more likely to desire revenge. As expected, countries high in MAS were more likely to desire revenge than countries low in MAS [$r(13) = -.24; p = .43$]. For every one standard deviation increase in Masculinity, there is a .24 standard deviation increase in revenge. This relationship, however, could not be statistically distinguished from zero $Q_{between}(1) = .74, ns$. The between study variance for this effect was estimated at $\tau^2 = 0.18$. When accounting for estimated between studies variances the remaining variability across studies cannot be distinguished from random sampling variation, $Q_{within}(12) = 12.81, ns$.

Because forgiveness is associated with empathy and with seeing the other parties' perspective, the rigidity found in cultures high in uncertainty avoidance (UAI) would make revenge a more common strategy in high UAI countries. As expected, countries high in UAI were more likely to desire revenge than countries low in UAI [$r(15) = -.41; p = .12$]. For every one standard deviation increase in Uncertainty Avoidance, there is a .41 standard deviation increase in revenge. This relationship, however, could not be statistically distinguished from zero $Q_{between}(1) = 2.24, ns$. The between study variance for this effect was estimated at $\tau^2 = 0.19$. When accounting for estimated between studies variances the remaining variability across studies cannot be distinguished from random sampling variation, $Q_{within}(15) = 13.11, ns$.

Secondary Analyses

I examined three methodological moderators: the percentage of the sample that was female, whether or not the country was involved in current or recent war, and whether or not the participants were adults or students. Hofstede offers two MAS scores for each country, the default MAS and an MAS based on the percent of the population that is female because he has noted a significant difference between the two. However, in this study, the percentage of the sample that was female did not moderate the interaction of forgiveness and culture [$r(10) = -.03, Q_{between}(1) = .01$].

Out of the 16 studies reviewed, only two were in war torn countries. An analysis showed that war did not moderate forgiveness and culture, but the small sample of studies from war torn countries did not provide sufficient data to complete the analysis successfully. Previous studies have also indicated a moderating effect for age, so I performed a moderator analysis for participant type (e.g., adult, student). Though previous research found older adults to be more

forgiving than students, this analysis found the opposite. Student participants were more likely to forgive than adult participants [$r(12) = -.50$; $Q_{between}(1) = 3.03$].

Discussion

The goal of this meta-analysis was to learn which specific factors influence cultural differences in revenge and forgiveness. The first hypothesis was that countries higher in Collectivism would be more likely to forgive than countries higher in Individualism. Whereas the effect was not statistically significant, the correlation was in the expected direction, yet weak in magnitude. Perhaps, as theorized in the introduction, individuals from countries higher in Collectivism forgive more easily or frequently in order to maintain social harmony, since their orientation is interdependent (Fu, et al., 2008; Hook, et al., 2012). Kadiangandu, Gauché, Vinsonneau, and Mullet (2007) found for the collectivistic Congolese, more so than the individualistic French, forgiveness was conceptualized as an end of resentment and “the restoration of sympathy, affection, and trust leading to reconciliation with the offender” (p. 437). In more collectivistic cultures, forgiveness can be offered by or to a representative group of persons, even someone unknown to the victim (Bagnulo, et al., 2009). It appears forgiveness is easier for people in collectivistic cultures because they provide more opportunities to grant it. Kadiangandu, et al. (2007) suggest forgiveness is given easily in the Congo, a more collectivistic country, because of the importance of maintaining group bonds -- easing resentment can make everyday interactions with important group members much easier.

Future research in this area should measure in collectivist cultures the amount of forgiveness granted *by* individuals within in-groups (as compared to out-groups) and the amount of forgiveness granted *to* individualists in their in-group (as compared to out-groups). People in

collectivist cultures might grant more forgiveness to their in-group than people in individualist cultures because the need to maintain group harmony and solidarity (Leung & Bond, 1985). Given the need to maintain group solidarity, the amount of forgiveness granted to out-group members in collectivist cultures may be equivalent to, or even less than the forgiveness granted to out-group members in individualist cultures.

The second hypothesis was that participants from countries higher in Masculinity would be more likely than participants from countries lower in Masculinity to express a desire for revenge. Whereas the effect was in the expected direction, the difference did not reach conventional levels of statistical significance. The small magnitude of the relationship between revenge and masculine cultures is surprising considering the significant effect of gender on revenge (Miller et al., 2008). Maxwell, et al. (2005) found Chinese participants reported significantly more thoughts of revenge than did British participants. China has a Masculinity score of 66, and Great Britain has a Masculinity score of 57 for a difference of 9. Perhaps China's higher score on the Masculinity dimension, indicating Chinese participants were more likely to prioritize competitiveness, ambition, and the accumulation of wealth, explains this difference in thoughts of revenge. Great Britain's lower score on the Masculinity dimension indicates British participants are more likely to prioritize relationships and quality of life, making reconciliation more likely.

The third hypothesis was that participants from countries higher in Uncertainty Avoidance would be more likely than those from countries lower in Uncertainty Avoidance to desire revenge. This effect was the largest of Hofstede's (2001) four dimensions. The effects were in the expected direction but were not statistically significant. Neto and Pinto (2010) found Angolan participants expressed a higher willingness to forgive than did Portuguese participants.

Portugal and Angola had the largest difference in Uncertainty Avoidance scores in the sample. Portugal has an Uncertainty Avoidance score of 104, and Angola has a score of 54, for a difference of 50. Perhaps Portuguese participants were less willing to forgive because their high Uncertainty Avoidance score indicates they value predictability and certainty, making them focused on revenge to maintain their view of the world. Those in high Uncertainty Avoidance cultures like Portugal may seek revenge because they have a sense of unsatisfied justice when a situation fails to conform to their expectations (Eisenberger, et al., 2004).

The fourth hypothesis was that participants from countries higher in Power Distance would be more likely than participants from countries lower in Power Distance to seek revenge. This effect was in the expected direction and was the second largest effect of those observed in the current study. The effect, however, was not statistically significant. Chinese participants reported more thoughts of revenge than did British participants (Maxwell, et al., 2005). China has a Power Distance score of 68, and Great Britain has a score of 35 for a difference of 33. In high Power Distance cultures like China, people expect power to be distributed unequally, making revenge a more common strategy than in low Power Distance countries like Great Britain. It is possible Chinese participants reported more thoughts of revenge because they perceived the chance of procedural justice to be low. According to Sandage and Williamson (2005), “Awareness of cultural dynamics of power and control in various systems can help prevent the use of forgiveness interventions that are ineffective or even harmful” (p. 52).

Nearly all of the studies in the sample were originally conducted to examine differences between two countries with a large discrepancy in the area of Individualism/Collectivism. Surprisingly, the dimension of Individualism/Collectivism did not show the largest differences. The literature likely focuses on this construct because its history is significantly longer than

Hofstede's Dimensions, where were originally published in 1980. However, maintaining the focus on the East/West dichotomy still prevalent in current literature may be doing a disservice to other diverse cultural differences. If the authors had specifically targeted sets of countries paired on their discrepancies in Masculinity, Power Distance, and Uncertainty Avoidance, larger differences in revenge based on these factors likely would be apparent. For Masculinity, the most high contrast pairing possible would be Japan (score of 95) and Sweden (score of 5). For Power Distance, the most high contrast pairing possible would be Malaysia (score of 104) and Austria (score of 11). For Uncertainty Avoidance, the most high contrast pairing possible would be Greece (score of 112) and Singapore (score of 8; Hofstede, 2001).

A few methodological issues might impact the interpretation of the results from the current study. Cultures vary in preferences for self-report and self-attributions. Individuals from Western cultures are more self-positive than those from Eastern cultures (Heine et al., 1999). People from Western cultures might report less revenge but perpetrate more acts of revenge than those from Eastern cultures. Gosling et al. (1998) suggested self-reports are positively distorted, especially for desirable traits. Research that measures revenge behaviors, as opposed to reported revenge behaviors or attitudes, could eliminate this issue. Direct observations of revenge or forgiveness behavior would be most accurate.

In this meta-analysis, we reverse coded revenge-focused measures in comparison to forgiveness-focused measures, but we did not differentiate between them otherwise. It is likely the wording of the questions impacts cultures differently. Additionally, the use of self-report measures was consistent across all surveys, but there was a wide variety of diversity in the type of measure used. If key researchers in the field would agree upon a standard measure, comparison would be more accurate.

Research on cultural differences in revenge attitudes and behavior is a relatively young field with many possibilities for future studies. Hofstede originally designed his factors while working as a management trainer for IBM. One field where additional studies of cross-cultural differences in revenge could be beneficial is industrial and organizational psychology. Only one of the studies in the sample measured revenge in the workplace. Tinsley and Weldon (2003) found Chinese managers more than American managers showed a stronger desire to shame employees who behaved badly, but the two groups were equally likely to express a desire for revenge. They note “although the Chinese have as much propensity to enact revenge as the Americans, they do so in a different way” (p. 190). Future studies could compare revenge in workplaces in several different cultures. Self-report could be used, but internal reports of instances connected to revenge could provide more specific detail about actual acts of revenge. Multinational corporations could use this information to better train their employees for cross-cultural business interactions.

An equally valuable field for future inquiry is the study of cultural universals in forgiveness and revenge. In several of the studies in the current sample, the investigators found cross-cultural consistency. Bagnulo et al. (2009) found participants from both France and Uruguay utilized the same four-factor forgiveness structure, Change of Heart, More than Dyadic Process, Encourages Repentance, and Immoral Behavior. Maxwell et al. (2005) found participants from both Great Britain and Hong Kong utilized the same four-factor anger rumination structure, Angry Memories, Thoughts of Revenge, Angry Afterthoughts and Understanding of Causes. This research and future studies like it, enables researchers and those working on conflict to use the same terminology, leading to greater advancement of knowledge in the field.

Another possibility is that within-country cultural differences may be larger than between-country cultural differences. Kitayama, et al. (2006) found residents of the island of Hokkaido in northern Japan were more similar in their independent agency to European Americans than the residents of southern Japan. They attribute this strong orientation toward personal choice the “Voluntary Settlement Hypothesis.” This hypothesis is based on the idea that voluntary settlers, like the Japanese that moved north to Hokkaido, are more likely to have an autonomous, goal-orientated mindset. If independent agency is related to revenge seeking, people in Northern Japan likely would seek revenge at similar levels as those from European countries but not similar to those in Southern Japan.

Similarly, Cohen, Nisbett, Bowdle, and Schwarz (1996) found Americans raised south of the Mason-Dixon line were more likely to react to an insult from an experimental confederate with aggressive and dominant behavior. Cohen and colleagues attribute this result to the “culture of honor” in the Southern United States in which small disputes can have serious consequences for social status and reputation. This suggests that American Southerners would be more likely to seek revenge than American Northerners. Future studies could compare people from different regions of another country to see if region of that country had more impact on revenge and forgiveness behaviors than cross-cultural differences.

Cross-cultural differences are not necessarily cross-country differences, and a more localized approach might provide greater insight into culture differences in revenge and forgiveness than comparing these behaviors across countries. Unfortunately, within-country comparisons are not possible with Hofstede’s (2001) dimensions because he provides culture indices grouped by country, not culture. However, measures that assess similar constructs could be used for intra-country cultural differences. One example is Webster and Kruglanski’s (1994)

“Need for Cognitive Closure,” which is similar to Hofstede’s “Uncertainty Avoidance” in that for both measures, individuals that score higher need more order and structure than those that score lower. Such individual difference measures could be used to provide comparisons across cultural groups within the same country that could be associated with differences in revenge and forgiveness.

Because the correlations between revenge or forgiveness and Hofstede’s dimensions did not reach statistical significance, other moderators must be considered. One factor which may have a large association with revenge and forgiveness in a society is economic inequality. In their book, *The Spirit Level*, Wilkinson and Pickett (2009) suggested that, in more hierarchical societies, shame and status are more important and that individuals are willing to take larger, more violent risks to maintain reputation. In other words, individuals from more hierarchical societies must seek swift revenge when wronged in order to maintain their tenuous status. In high Power Distance countries, individuals accept and expect power to be distributed unequally. Perhaps they would also accept and expect resources to be distributed unequally. Therefore, individuals in an unequal society with high Power Distance would seek less revenge for this perceived unfairness than would individuals in an unequal society with low Power Distance. Researchers who measure revenge behaviors in societies with different levels of economic inequality could test this hypothesis. Additionally, artificially creating conditions of economic equality in a lab setting is more feasible, and could provide further data for analysis on inequality’s impact on revenge.

Conclusion

Many factors impact the decision to seek revenge or to grant forgiveness, including the cultural background of those involved, the relationship of the perpetrator and the victim, and their statuses with their society. The decision will also have far reaching consequences on the individual or group's mental and physical health, the relationship under duress, as well as other relationships within the social group. Hamber (2007) states, "Dealing with and trying to understand the social, political and psychological relevance of forgiveness...is a complex and difficult subject that raises many questions" (p.115). However, research into this complex subject "may provide an important means of bridging diverse cultural perspectives" (Holt & DeVore, 2005, p. 166) that might reduce conflict and resulting responses. The results of the current study suggest that pursuing cultural dimensions of Uncertainty Avoidance and Power Distance show the most promise in identifying key differences across cultures in revenge and forgiveness.

References

- American Psychological Association. (2003). Guidelines for psychological practice with older adults. *American Psychologist*, 59, 236-260. Retrieved from www.apa.org/practice/adult.pdf
- Aquino, K., Tripp, T.M., & Bies, R.J. (2006). Getting even or moving on? Power, procedural justice, and types of offense as predictors of revenge, forgiveness, reconciliation and avoidance in organizations. *Journal of Applied Psychology*, 91(3), 653-668.
- Azar, F. & Mullet, E. (2001). Interpersonal forgiveness among Lebanese: A six-community study. *International Journal of Group Tensions*, 30(2), 161-181.
- *Bagnulo, A., Muñoz-Sastre, M. T., & Mullet, E. (2009). Conceptualizations of forgiveness: A Latin America-Western Europe comparison. *Universitas Psychologica*, 8(3), 673-682.
- Barber, L., Maltby, J., & Macaskill, A. (2005). Angry memories and thoughts of revenge: The relationship between forgiveness and anger rumination. *Personality and Individual Differences*, 39(2), 253-262. doi:10.1016/j.paid.2005.01.006
- Berlin, J. A., Laird, N. M., Sacks, H. S. & Chalmers, T. (1989). A comparison of statistical methods for combining event rates from clinical trials. *Statistics in Medicine*, 8, 141–151.
- Blader, S. L., Chang, C., & Tyler, T. R. (2001). Procedural justice and retaliation in organizations: Comparing cross-nationally the importance of fair group processes. *International Journal of Conflict Management*, 12(4), 295-311.
- Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2007). Introduction to meta-analysis. Chichester: John Wiley & Sons, Ltd.

- Carlsmith, K. M., Wilson, T. D., & Gilbert, D. T. (2008). The paradoxical consequences of revenge. *Journal of Personality and Social Psychology*, 95, 1316–1324.
- Cohen, D., Nisbett, R.E., Bowdle, B.F., & Schwarz, N. (1996). Insult, Aggression, and the Southern Culture of Honor: An “Experimental Ethnography.” *Interpersonal Relations and Group Processes*, 70(5), 945-960.
- Cornick, C., Schultz, J.M., Tallman, B., & Altmaier, E. M. (2011). Forgiving significant interpersonal offenses: The role of victim/offender racial similarity. *Psychology*, 2(9), 936, 940.
- Coyle, C.T., & Enright, R.D. (1997). Forgiveness intervention with post-abortion men. *Journal of Consulting and Clinical Psychology*, 65, 1042-1046.
- Daly, M. & Wilson, M. (1988). *Homicide*. New York: Aldine de Gruyter.
- Deal, J. J., Prince, D. W., & Center for Creative Leadership. (2003). *Developing cultural adaptability: How to work across differences*. Greensboro, N.C: Center for Creative Leadership.
- Diamond, S. (1977). The effect of fear on the aggressive response of anger aroused and revenge motivated subjects. *Journal of Psychology*, 95 (2), 185-189.
- Eisenberger, R., Lynch, P., Aselage, J., & Rohdieck, S. (2004). Who takes the most revenge? Individual differences in negative reciprocity norm endorsement. *Personality and Social Psychology Bulletin*, 30(6), 789-799.
- Elster, J. (1990). Norms of revenge. *Ethics*, 100: 862-885.

- Enright, R. D. & Fitzgibbons, R. (2000). *Helping clients forgive: An empirical guide for resolving anger and restoring hope*. Washington, DC: APA Books.
- Fehr, R., Gelfand, M.J., & Nag, M. (2010). The road to forgiveness: A meta-analytic synthesis of its situational and dispositional correlates. *Psychological Bulletin* 136(5). 894-914.
- Fitzgibbons, R. P. (1986). The cognitive and emotive used of forgiveness in the treatment of anger. *Psychotherapy*, 23, 629-633.
- Fu, H., Watkins, D., & Hui, E. K. P. (2008). Forgiveness and personality in a Chinese cultural context. *IFE Psychologia: An International Journal*, 16, 1-15.
- Gollwitzer, M., Meder, M. and Schmitt, M. (2011). What gives victims satisfaction when they seek revenge? *European Journal of Social Psychology*, doi: 10.1002/ejsp.782
- Gosling, S.D., John, O.P., Craik, K.H., & Robins, R.W. (1998). Do People Know They Behave? Self-Reported Act Frequencies Compared with On-Line Codings by Observers. *Journal of Personality and Social Psychology*, 74(5), 1337-1349.
- Hamber, B. Forgiveness and reconciliation: Paradise lost or pragmatism? *Peace and Conflict: Journal of Peace Psychology*, 13(1), 115-125.
- Harris, A. H. S., & Thoresen, C. E. (2005). Forgiveness, unforgiveness, health, and disease. In E. L. Worthington Jr. (Ed.), *Handbook of forgiveness* (pp. 321–334). New York, NY: Routledge.

- Hedges, L. and Olkin, I. (1985) *Statistical Methods for Meta-Analysis*. New York: Academic Press.
- Hedges, L.V., & Vevea, J. L. (1998). Fixed- and random-effects models in meta-analysis. *Psychological Methods*, 3, 486-504.
- Heine, S. J., Lehman, D. R., Markus, H. R. & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review*, 106, 766–794.
- Henrich, J., McElreath, R., Barr, A., Ensminger, J., Barrett, C., Bolyanatz, A., ... Ziken, J. (2006). Costly punishment across human societies. *Science*, 312, 1767–1770.
- Ho, M. & Fung, H.H. (2011). A Dynamic Process Model of Forgiveness: A Cross-Cultural Perspective. *Review of General Psychology* 15(1), 77-84.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Thousand Oaks, CA: Sage Publications.
- Holt, J.L. and DeVore, C.J. (2005). Culture, gender, organizational role, and styles of conflict resolution: A meta-analysis. *International Journal of Intercultural Relations*, 29(2), 165-196.
- Hook, J. N., Worthington, E. L., & Utsey, S. O. (2009). Collectivism, forgiveness, and social harmony. *The Counseling Psychologist*, 37(6), 821-847.
- Hook, J. N., Worthington, E. r., Utsey, S. O., Davis, D. E., & Burnette, J. L. (2012). Collectivistic self-construal and forgiveness. *Counseling and Values*, 57(1), 109-124. doi:10.1002/j.2161-007X.2012.00012.

Kadiangandu, J. K. & Mullet, E. (2007). Intergroup Forgiveness: A Congolese Perspective.

Peace and Conflict: Journal of Peace Psychology, 13(1), 37-49.

*Kadiangandu, J. K., Gauché, M., Vinsonneau, G., & Mullet, E. (2007). Conceptualizations of forgiveness: Collectivist-Congolese versus individualist-French viewpoints. *Journal of Cross-Cultural Psychology*, 38(4), 432-437.

*Kadiangandu, J. K., Mullet, E., & Vinsonneau, G. (2001). Forgiveness: A Congo-France comparison. *Journal of Cross-Cultural Psychology*, 32(4), 504-511.

Kaiser, C.R., Vick, S.B., & Major, B. (2004). A prospective investigation of the relationship between just-world beliefs and the desire for revenge after September 11, 2001. *Psychological Science*, 15(7), 503-506.

Karremans, J. C. & Van Lange, P. A. M. (2005). Does activating justice help or hurt in promoting forgiveness? *Journal of Experimental Social Psychology*, 41, 290 –297.
doi:10.1016/j.jesp.2004.06.00

Karremans, J. C., Van Lange, P. A. M., Ouwerkerk, J. W., & Kluwer, E. S. (2003). When forgiving enhances psychological well-being: The role of interpersonal commitment. *Journal of Personality and Social Psychology*, 84, 1011-1026.

Karremans, J. C., Regalia, C., Paleari, F. G., Finham, F. D., Cui, M., Takada, N. ...Uskul , A. K. (2011). Maintaining harmony across the globe: The cross-cultural association between closeness and interpersonal forgiveness. *Social Psychology and Personality Science*, 2(5), 443-451. doi: 10.1177/1948550610396957

- Karremans, J.C. & Smith, P.K. (2010). Having the power to forgive: When the experience of power increases interpersonal forgiveness. *Personality and Social Psychology Bulletin*, 36(8), 1010-1023.
- Kitayama, S., Ishii, K., Imada, T., Takemura, K., & Ramaswamy, J. (2006). Voluntary Settlement and the Spirit of Independence: Evidence from Japan's "Northern Frontier." *Journal of Personality and Social Psychology*, 91 (3), 369-384.
- Lawler, E.J., Ford, R.S., and Blegen, M.A. (1988). Coercive capability in conflict: A test of bilateral deterrence versus conflict spiral theory. *American Sociological Association*, 51(2), 93-107.
- Lawler, K. A., Younger, J. W., Piferi, R. L., Jobe, R. L., Edmondson, K. A., & Jones, W. H. (2005). The unique effects of forgiveness on health: An exploration of pathways. *Journal of Behavioral Medicine*, 28, 157–167.
- Leung, K., & Bond, M. H. (1984). The impact of cultural collectivism on reward allocation. *Journal of Personality and Social Psychology*, 47, 793-804.
- Macaskill, A., Maltby, J., & Day, L. (2002). Forgiveness of Self and Others and Emotional Empathy. *The Journal of Social Psychology*, 142(5), 663-665.
- *Maxwell, J. P., Moores, E., & Chow, C. C. F. (2007). Anger rumination and self-reported aggression amongst British and Hong Kong Chinese athletes: A cross cultural comparison. *International Journal of Sport and Exercise Psychology*, 5(1), 9-27.

- *Maxwell, J. P., Sukhodolsky, D. G., Chow, C. C. F., & Wong, C. F. C. (2005). Anger rumination in Hong Kong and Great Britain: Validation of the scale and a cross-cultural comparison. *Personality and Individual Differences*, 39(6), 1147-1157.
- McCullough, M.E. (2008). *Beyond Revenge: The Evolution of the Forgiveness Instinct*. San Francisco: Jossey-Bass.
- McCullough, M. E., Bellah, C. G., Kilpatrick, S. D., & Johnson, J. L. (2001). Vengefulness: Relationships with forgiveness, rumination, well-being, and the big five. *Personality and Social Psychology Bulletin*, 27, 601–610.
- McCullough, M.E., Bono, G., & Root, L.M. (2007). Rumination, emotion, and forgiveness. *Journal of Personality and Social Psychology*, 92(3), 490-505.
- McCullough, M. E., Kurzban, R., & Tabak, B. A. (2010). Evolved mechanisms for revenge and forgiveness. In P. R. Shaver and M. Mikulincer (eds.), *Understanding and reducing aggression, violence, and their consequences* (pp. 221-239). Washington, DC: American Psychological Association.
- Miller, A.J., Worthington, E.L., McDaniel, M.A. (2008). Gender and forgiveness: A meta-analytic review and research agenda. *Journal of Social and Clinical Psychology*, 27 (8), 843-876.
- Mullet, E., & Azar, F. (2009). Apologies, repentance, and forgiveness: A Muslim-Christian comparison. *International Journal for the Psychology of Religion*, 19(4), 275-285.
- Mullet, E., & Neto, F. (2009). Lay people's views on intergroup forgiveness. *Peace Review*, 21(4), 457-463.

- Mullet, E., Girard, M., & Bakhshi, P. (2004). Conceptualizations of forgiveness. *European Psychologist*, 9(2), 78.
- Mullet, E., Neto, F. & Rivi re, S. (2005). Personality and its effects on resentment, revenge, and forgiveness, and on self-forgiveness. In E.L. Worthington, Jr. (Ed.), *Handbook of Forgiveness* (pp. 159-181). New York: Routledge.
- *Nateghian, S., Molazadeh, J., Lignon, S. & Mullet, E. (2009). Forgivingness: An Iran-Western Europe comparison. *Advances in Psychology Research*, 66, 345-351.
- *Neto, F., & Da Concei  o Pinto, M. (2010). Forgivingness: An Angolan-Portuguese comparison. *Journal of Psychology in Africa*, 20(2), 275-280.
- *Neto, F., Da Concei  o Pinto, M., and Mullet, E. (2007). Intergroup Forgiveness: East Timorese and Angolan Perspectives. *Journal of Peace Research*, 44(6), 711–728.
- *Neto, F., Da Concei  o Pinto, M., and Mullet, E. (2007). Seeking forgiveness in an intergroup context: Angolan, Guinean, Mozambican, and East Timorese perspectives. *Regulation & Governance*, 1, 329–346.
- Orcutt, H. K. (2006). The prospective relationship of interpersonal forgiveness and psychological distress symptoms among college women. *Journal of Counseling Psychology*, 53, 350 – 361.
- *Paz, R., Neto, F., & Mullet, E. (2008). Forgiveness: A China-Western Europe comparison. *Journal of Psychology: Interdisciplinary and Applied*, 142(2), 147-157.

- Pronk, T.M., Karremans, J.C., Overbeek, G., Vermulst, A.A., & Wigboldus, H.J. (2010). What it takes to forgive: When and why executive functioning facilitates forgiveness. *Journal of Personality and Social Psychology*, 98(1), 119-131.
- Rosenthal, R. (1979). The “file drawer problem” and tolerance for null results. *Psychological Bulletin*, 86(3), 638-641.
- Rye, M.S., Loiacono, D.M., Folck, C.D., Olszewski, B.T., Heim, T.A., & Madia, B.P. (2001). Evaluation of the psychometric properties of two forgiveness scales. *Current Psychology*, 20, 260-277.
- Sandage, S. J., & Williamson, I. (2005). Forgiveness in cultural context. In E. L. Worthington (Ed.), *Handbook of forgiveness* (pp. 41-56). New York: Routledge.
- Shadish, W.R. & Haddock, C.K. (1994). Combining estimates of effect size. In H. Cooper & L.V. Hedges (Eds.) *Handbook of Research Synthesis* (pp.261-281). New York: Russell Sage Foundation.
- So, K.W. (2004). *Attribution processes, emotions and culture as determinants of forgiveness*. (Doctoral dissertation). Loma Linda University, Loma Linda, CA.
- Speckhard, A., & Akhmedova, K. (2006). Black widows: The Chechen female suicide terrorists. In Y. Schweitzer (Ed.), *Female suicide bombers: Dying for equality?* (pp. 63–80). Tel Aviv, Israel: Jaffee Centre for Strategic Studies. Retrieved from <http://www.tau.ac.il/jcss/memoranda/memo84.pdf>

Strelan, P., & Sutton, R. M. (2011). When just-world beliefs promote and when they inhibit forgiveness. *Personality and Individual Differences*, 50(2), 163-168.

doi:10.1016/j.paid.2010.09.019

Subkoviak, M.J., Enright, R.D., Ching-Ru, W., Gassin, E.A., Freedman, S., Olson, L.M., & Sarinopoulos, I. (1995). Measuring interpersonal forgiveness in late adolescence and middle adulthood. *Journal of Adolescence*, 18, 641-655.

*Suchday, S., Friedberg, J. P., & Almeida, M. (2006). Forgiveness and rumination: A cross-cultural perspective comparing India and the US. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 22(2), 81-89.

Sukhodolsky, D. G., Golub, A., & Cromwell, E. N. (2001). Development and validation of the anger rumination scale. *Personality and Individual Differences*, 31, 689–700.

*Suwartono, C., Prawasti, C. Y., & Mullet, E. (2007). Effect of culture on forgivingness: A southern Asia-Western Europe comparison. *Personality and Individual Differences*, 42(3), 513-523.

Tabak, B.A., McCullough, M.E., Luna, L.R., Bono, G., & Berry, J.W. (2012). Conciliatory gestures facilitate forgiveness and feelings of friendship by making transgressors appear more agreeable. *Journal of Personality*, 80(2), 504-536.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago: Nelson Hall.

- *Takaku, S., Weiner, B., & Ohbuchi, K. (2001). A cross-cultural examination of the effects of apology and perspective taking on forgiveness. *Journal of Language and Social Psychology. Special Issue: Language, Education, and Social Dynamics: A Tribute to W. Peter Robinson*, 20(1-2), 144-166.
- *Tinsley, C. H., & Weldon, E. (2003). Responses to a normative conflict among American and Chinese managers. *International Journal of Cross Cultural Management*, 3(2), 183-194.
- Van Rossum, J. H. A. (1998). Why children play: American versus Dutch boys and girls. In G. Hofstede (Ed.), (pp. 130-138). Thousand Oaks, CA, US: Sage Publications, Inc.
- Webster, D.M. & Kruglanski, A.W. (1994). Individual Differences in Need for Cognitive Closure. *Journal of Personality and Social Psychology*, 67 (6), 1049-1062.
- Wilkinson, R. & Pickett, K. (2009). *The spirit level: Why greater equality makes societies stronger*. Fairfield, PA: Bloombury Press.
- Yoshimura, S. (2007). Goals and emotional outcomes of revenge activities in interpersonal relationships. *Journal of Social and Personal Relationships*, 24 (1), 87-98. doi: 10.1177/0265407507072592
- *Articles used in the meta-analysis are designated with an asterisk.

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Education

Masters of Arts in Psychology, December 2013

University of North Florida, Jacksonville

Advisor: Dan Richard, Ph.D., Social Psychology and Quantitative Methods

Bachelor of Science in Psychology, *cum laude* 2006

University of Florida, Gainesville

Minors in Linguistics and Teaching English to Speakers of Other Languages

Awards and Honors

Outstanding Student Poster Award recipient: Society for Southeastern Social

Psychologists Conference 2009

Della M. Levy scholarship recipient (Award for promising women on the First Coast)

UNF College of Arts and Sciences Graduate Scholarship recipient

UNF Graduate Grant recipient (For master's thesis research)

Psi Chi: National Honor Society in Psychology member

University of Florida President's List

University of Florida Dean's List

University of Florida Community College Academic Transfer Scholar

Excellence Award for Outstanding Achievement in the Honors Program recipient

Academic Achievement Scholarship recipient

Florida Medallion Scholars Award recipient

Scholarship Presentations

Richard, D., Lennon, R., & Wang, D. (2011, September). Individualism, Power Distance, and Revenge: A

Cross-cultural Meta-analysis. Presentation at the annual conference of the Society for Terrorism Research. Irvine, California.

Lennon, R., & Richard, D. (2009, November). An Eye for An Eye?: Cultural Differences in Revenge and

Forgiveness. Poster session presented at the annual conference of the Society of Southeastern Social Psychologists. Fort Myers, FL.

Lennon, R., Galarneau, A., Hawkins, L.B., Leone, C. & O'Connor, D. (2008, October). "Here's to you,

Mrs. Robinson": Attributions about Perpetrators of Sexual Abuse. Poster session presented at the annual conference of the Society of Southeastern Social Psychologists, Greenville, SC.

Lennon, R., Leone, C., & Sommerfeld, S. (2008, March). Individual Differences in Self-Monitoring and

Friendship. Poster session presented at the University of North Florida's Annual Research Symposium. Jacksonville, FL.

Research Experience

Research Assistant, University of North Florida Office of Faculty Enhancement

August 2009- July 2011

- Coded data gathered from faculty pedagogy experiments
- Completed relevant statistical analyses using SPSS and generated reports
- Re-designed and maintained the department website using Dreamweaver

Research Assistant, Dr. Christopher Leone, Professor of Psychology

October 2007-December 2008

- Earned certification in the protection of human research participants - CITI (Collaborative Institutional Training Initiative)
- Assisted in writing and submitting protocols to the IRB
- Collected data independently for several empirical studies

Teaching Experience

Instructional Assistant/Academic Tutor, Florida State College, Jacksonville FL

October 2007-January 2012

- Oversaw daily operations of the Communications (Writing) Lab, including supervising 60+ student tutors
- Tutored students in critical, analytical, and persuasive writing
- Improved student success in college, pre-college, and ESL reading and writing

Service

University

Graduate Student Representative, College of Arts and Sciences Student Advisory Council

- Met with the dean to present student perspectives on policy and campus issues

Guest Lecturer, Stress Management undergraduate class (Dr. Nancy Schwartz)

- Spoke on psychology, yoga, and stress management

Guest Lecturer, Social Psychology undergraduate class (Dr. Lori Lange)

- Lectured on obedience, compliance, and the Milgram experiment

Peer Editor, Person by Situation Interaction Research Team

- Provided editorial review and assistance to undergraduate research team members preparing manuscripts

Tutor, English Language Institute, Gainesville, Florida

- Assisted non-native speakers of English with homework and languages skills outside of the classroom